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ABSTRACT

Intended as a guide for postsecondary faculty and administrators, this document suggests training and management decision guidelines for selection and implementation of an experience-based collegiate (EbCE) program. It is concerned with only one form of experiential learning--field experience or community-based education (internships, cooperative education programs, field trips, practicums). Chapter 1 is an introduction. Chapter 2 overviews the guide and introduces the action research model which is the basis for the implementation process. Chapter 3 discusses the rationale and nature of experiential learning. Attention is given to Kolb's four-phase experiential instructional system. Eight guidelines from the literature that are important to effective field experience instruction are presented. As a guide for curriculum development, chapter 4 provides a profile of EbCE, a field experience/intership postsecondary program designed by the Appalachian Educational Laboratory (AEL). Chapter 5 outlines some existing program variations, reviews laws governing secondary and postsecondary school evaluation efforts, and describes agencies with oversight concerning quality control of educational processes and establishment of learning outcomes. Its major thrust is a learning measurement. Chapter 6 summarizes program scope and processes. Appendixes include a planning sheet for program implementation and descriptions of instructional materials in AEL's experience-based career education. (YLB)

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A NUMBER OF SUGGESTIONS FOR THE IMPLEMENTATION OF EXPERIENCE BASED EDUCATION PROGRAMS IN POST SECONDARY SETTINGS

Assembled and Revised
from notes submitted by Dr. James E. Althof

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NATIONAL INSTITUTE OF EDUCATION

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CHAPTER 1

Introduction

The national emphasis on life-long learning and the increasing interest of large numbers of adults in continuing their education, reducing mid-career uncertainty, and increasing vocational flexibility suggest that a systematic experiential program with self awareness, career planning, and educationally valuable objectives will be useful for many post-secondary institutions. In response to this need, the Appalachia Educational Laboratory (AEL) as well as the other regional labs, such as Research for Better Schools (RBS), Far West Laboratory (FWL), and Northwest Regional Educational Laboratory (NWREL), have been working with curriculum specialists comprised of faculty from various community and four-year colleges to produce a structured, results-oriented experience-based curriculum acceptable at the collegiate level. As a result, students from such schools as Iowa Central Community College in Fort Dodge, Iowa; Itawamba Junior College in Tupelo, Mississippi; Manatee Junior College in Bradenton, Florida; Western Nevada Community College in Carson City, Nevada, have had the opportunity to participate in the formulation, evaluation, and final adaptation of a workable experience-based collegiate education (EbCE).

The decade of the 1970s has seen an explosive increase in the number of experience-based educational programs in the collegiate institutions. These came as a response to the cries for relevance from students, an attempt to better employ our graduates, and as an effort to compensate for the lack of experience in the daily lives of our youth. As adults

become an increasing factor in the enrollment of community and four-year colleges, already established experience-based programs like work-study, volunteer service, field experience, cooperative education and internships have become a useful tool to aid the re-entry of these more experienced college students.

The response of colleges of these needs has resulted in a history of rapid, often haphazard, expansion and experimentation in the use of experiential instruction. It was during this time that experience-based career education was undertaken as a national curriculum development effort. EbCE has since been adopted for the delivery of college-level educational objectives. Much has been learned about the essential process necessary to promote learning in field settings. From this rich history of experimentation and implementation, EBCE (Experience Based Career Education) drew upon those basic and fundamental curriculum processes necessary to ensure learning in experiential situations. EBCE has also used those administrative strategies which work to produce accountable, results-oriented field based educational programs.

Those colleges which are implementing the adapted EbCE are doing so to meet the needs of:

- matriculating freshmen who are uncertain of occupations for which they wish to prepare,
- individuals first entering the job market at 30-40 years of age,
- fully employed persons who want to increase their occupational mobility, but whose work schedules make that difficult for them,
- rural residents who live too far from campuses but wish to pursue college credit, and

- college graduates who wish to graduate with a balanced educational experience incorporating both the achievement and mastery of knowledge as well as a rich emoloyment history of the application of these ideas.

Students representing each of these subpopulations were involved in modified EBCEs or EbCEs during 1978. Materials that were developed during these pilot tests included (for the Iowa program) four new Curriculum Handbooks (describing concepts, sub-concepts, interest areas, and performance objectives which constitute elective, college level credits in English, mathematics, social studies and science); a revised Experience Site Learning Guide format (this document describes activities students may perform at the specific sites and relates those activities to the curriculum performance objectives); and a reviewed Basic Procedures Manual.

Other colleges have capitalized on these collegiate adaptations of the Appalachia Educational Laboratory's version of EBCE and EbCE, as well as the models from the other three laboratories. This document within these covers represents a sampling from these adoption and adaptation experiences as well as findings from general college level field experience education. It is only intended as a somewhat fleshed-out skeleton or outline for an implementation package which suggests training and management decision guidelines for future adopters and adapters of the EbCE. In addition, it includes samples of feasibility/needs analysis questionnaire(s) designed to aid the potential adopter in determining local readiness for EbCE, and in the identification of some local modifications that are necessary.

CHAPTER 2

Overview

This document is an outline for post-secondary faculty and administrators who are considering the implementation of an experience-based collegiate education program. It is intended as a

- brief review of the rationale and history of experiential education in post-secondary settings
- review of the necessary components and processes needed in high quality experience-based educational programs,
- review of the typical implementation process of innovative educational programs,
- resource for instruments that aid potential implementers in assessing their local readiness for an experience-based program and aid them in the selection of a locally suitable program model,
- set of illustrative cases and program profiles from several high quality post-secondary experience-based curricula,
- guide to additional resources which will aid the implementation process.

This guide is primarily addressed to the selection and implementation of an experience-based collegiate program. Many components of high quality programs can stand alone when reasonably implemented, and the chapters in this guide, while organized as steps of a total implementation process, are reasonably independent, allowing the reader with less ambitious interests to make use of it.

Experiential learning refers to learning in which the learner is directly in touch with the realities being studied. It is contrasted with

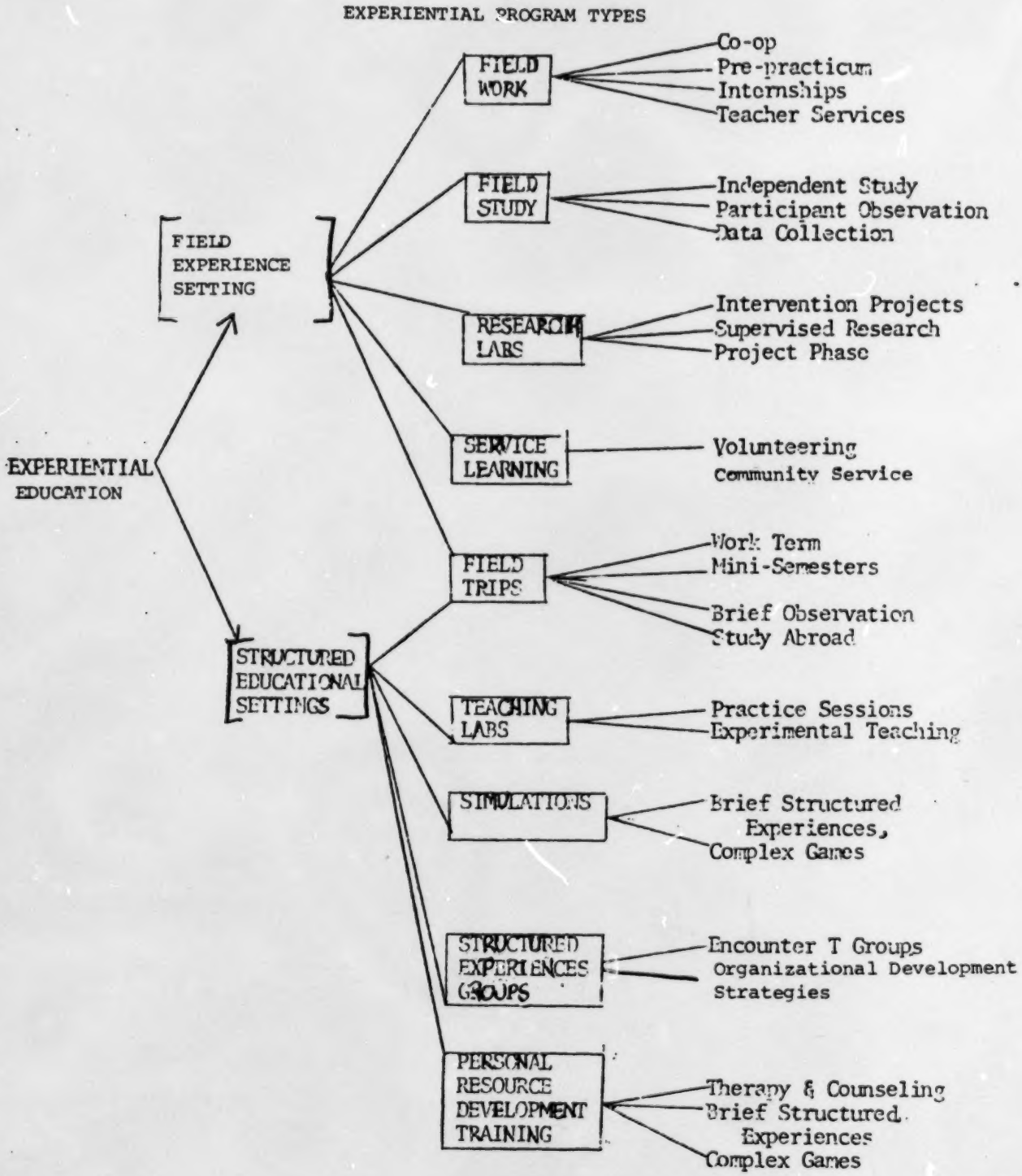
learning in which the learner only reads about, hears about, talks about, or writes about these realities but never comes in contact with them as part of the learning process. This volume is concerned with only one form of experiential learning: field experience, sometimes called community-based education. Field experience programs often go by more familiar names like internships, cooperative education programs, field experience, field trips, and practicums. These can be distinguished from other forms of experiential learning often referred to as "structured experiences." An example of these latter forms include such things as classroom role plays, simulations, and small group sessions. Figure 1 displays this distinction more graphically.

In addition to dealing with collegiate level, field experience educational programs, this guide focuses upon only those programs which meet criteria which:

- o contain a system of accountability which tracks learning outcomes,
- o interrelate careers/occupational experience with academic objectives,
- o provide for the achievement of academic objectives and learning outcomes through field experiences,
- o expose students to generic processes and skills which require the application of theories and problem-solving,
- o are individualized to the extent to which they focus upon individual career objectives, individual academic programs, and individual needs and abilities.

These criteria were selected because the literature on experiential education suggests these are necessary for high quality outcomes. Frequently,

Figure 1


EXPERIENTIAL PROGRAM TYPES
EXPERIENTIAL EDUCATION
FIELD EXPERIENCE SETTING
STRUCTURED EDUCATIONAL SETTINGS
FIELD WORK
Co-op
Pre-practicum
Internships
Teacher Services
FIELD STUDY
Independent Study
Participant Observation
Data Collection
RESEARCH LABS
Intervention Projects
Supervised Research
Project Phase
SERVICE LEARNING
Volunteering
Community Service
FIELD TRIPS
Work Term
Mini-Semesters
Brief Observation
Study Abroad
TEACHING LABS
Practice Sessions
Experimental Teaching
SIMULATIONS
Brief Structured Experiences,
Complex Games
STRUCTURED EXPERIENCES GROUPS
Encounter T Groups
Organizational Development Strategies
PERSONAL RESOURCE DEVELOPMENT TRAINING
Therapy & Counseling
Brief Structured Experiences
Complex Games

one or more of these components are missing from the more established programs of experiential education visible on post-secondary campuses. While these program standards narrow the number of programs that are available for study, they do address the challenges for high standards which have come from the academic community. The trends in education tend to move administrators, toward seeking workable programs which aid their students' careers while simultaneously requiring high performance levels on traditional, basic educational objectives. Programs which do not really address both work and education (as well as being personally relevant through individualizing the learning experience), will be of increasingly lower value to colleges and universities in the coming decades.

Thus, this guide urges the implementation of high quality, experience-based education programs which are designed from solidly founded educational theories and administrative processes. Often, the luxury of implementing an entire program is beyond the realm of reality and one must be content with more manageable goals. There are self-assessments in this guide which can aid in determining programming needs, as well as identifying component parts from various programs which can be excerpted and used with appropriate modification. Education systems with good quality control mechanisms can be used in partial ways. The same methods and processes which work for an entire campus can also work for an individual faculty member. The procedures for analyzing placements or establishing performance criteria can be adopted by the lone faculty member, his or her entire department, or by a service division such as a career office or campus-wide placement office.

A predictable stage of any implementation process includes a phase of not knowing enough to ask the right questions or to assess the appropriate resources. Since this guide is organized on a model of educational implementation and organizational development, a brief overview of those two processes should help orient the reader to make more effective use of these processes.

Where are you in the implementation process? Figure 2 illustrates the typical steps involved in the implementation of a new program or idea. This particular model was used by Jennifer Eis and Don Ward about five years ago to develop an off-campus nontraditional higher education program at Michigan State University.

Advancement from one step to the other resulting in ultimate incorporation of a new process, system or entire curriculum involves the constant cycling and recycling of goal identification, data collection, trial, reevaluation, revision, and so on through the next cycle. This constant recycling based on feedback and information has been called action research and comes from the field of organizational development.

Figure 3 is an illustrative model of action research as depicted by Herbert Shepherd. Action research has been defined as the application of the scientific method of fact finding and experimentation to practical problems requiring action, solutions, involving the collaboration and cooperation of scientists, practitioners, and laymen.

This guide is organized on the action research model and includes sample checklists and planning guides intended to help the potential adopter move up the ladder of implementation, taking each step at a time. Referring again to Figure 2 of the implementation process, the first few

Figure 2

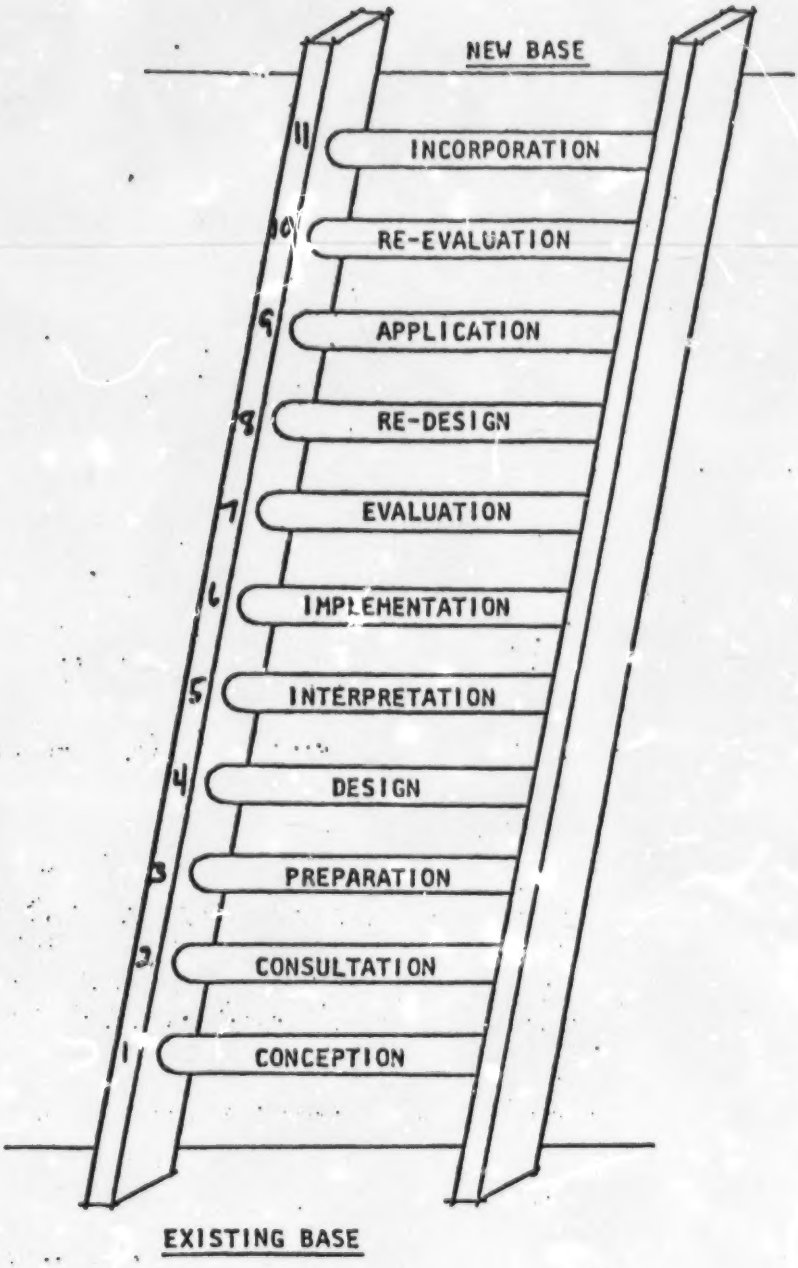
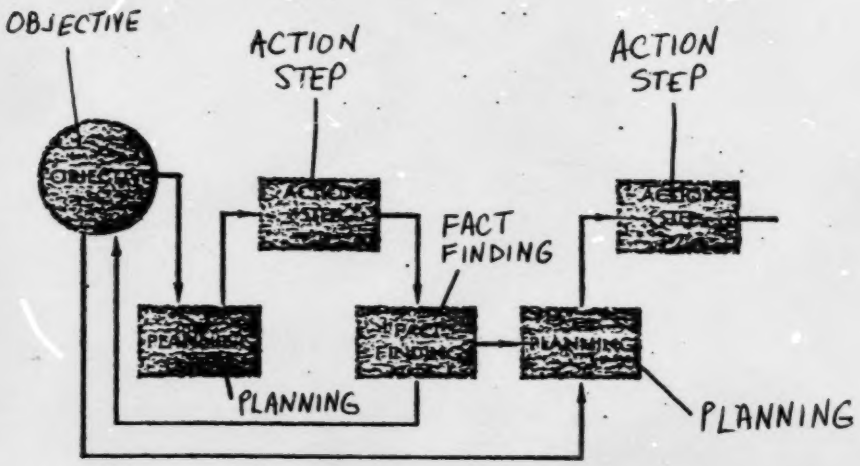

NEW BASE
11
INCORPORATION
10
RE-EVALUATION
9
APPLICATION
8
RE-DESIGN
7
EVALUATION
6
IMPLEMENTATION
5
INTERPRETATION
4
DESIGN
3
PREPARATION
2
CONSULTATION
1
CONCEPTION
EXISTING BASE

Figure 3



ACTION RESEARCH MODEL

steps involve gathering data about the status quo by a conceptual search of the literature and through consultation with others. Steps 1, 2, 3 and 6 result in gaining an understanding of the state of the art, assessing institutional readiness, and adopting/adapting an innovation. Resources in this guide are mostly designed to aid these steps.

The steps of Preparation and Design require the assessment of local problems, needs and facilities in the selection of the specific model. The goal here is identifying program performance criteria which will enable the implementer to tell whether or not a program model can produce the desired results.

These steps in actuality may be repeated several times using the "Action Research" process as a guide. As the implementer finds facts, plans, and eventually chooses one of the various model experiential education programs, each model is compared against original program objectives. This cycle repeats several times, often with the aid of a planning committee of interested faculty and staff until a consensus has been achieved. Resources in this guide which can aid in model selection and adoption include:

- the planning for implementation sheet in Appendix A,
- "feasibility and implementation consultation" in Chapter 4 on organizational context models,
- The AEL/EBCE implementation steps in Chapter 4,
- Chapter 4, "An experience-based collegiate education profile: the AEL model."

The planning sheet in Appendix A is designed to aid the implementer-planner in making notes of key processes and procedures. It contains space for

1) recording procedures which presently exist in the local situation, and 2) for noting procedures that are desired.

The next two steps (5 and 6), involve actual program start-up. The new program must be interpreted to other people within the educational system including training staff. Implementation begins in the sixth step of the model when the program begins to provide services to students.

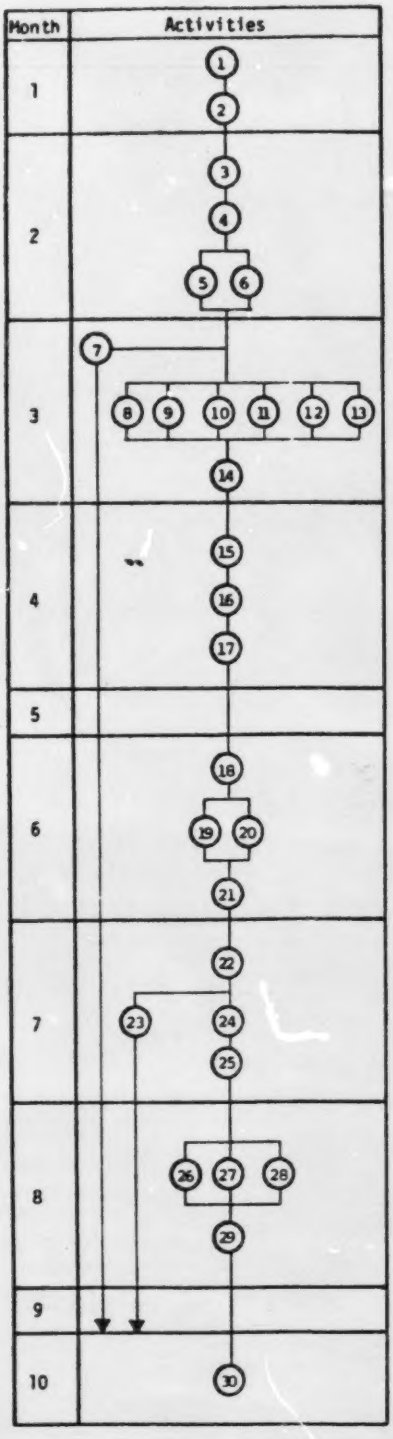
Later steps toward final incorporation or institutionalization involve a series of cycles through evaluation, modification, of the existing program, re-implementation, and reevaluation. Materials are not included in this guide for these development steps of formative evaluation, redesign and testing (pilot or field).

In order to complete the Planning Sheet, in Appendix A, an implementer will have to think about all the remaining steps in the implementation process. For example, to interpret and start (implement) a new program, a planner must mentally work through the entire process. This allows for the anticipation of such things as training costs, start-up time, linkages with other campus and community groups, office organization and evaluation, since all these things must be reflected in Step 4, selecting a program "design."

An example of the Implementation Ladder applied to the EBCE model of the Northwest Regional Educational Laboratory can be found in Figure 4. It illustrates the "action research" model with its continuous recycling in which the planner-implementer repeatedly collects information, evaluates and makes decisions. Again, looking at Figure 4, in order for activities 15 and 16 (securing board approval) to be achieved, activities 9-30 (staffing and program start-up) have to be anticipated and analyzed.

Figure 4

TIMELINE FOR EBCE PLANNING



Activities

1. Attend EBCE awareness presentations
2. Prepare EBCE information materials
3. Select and orient planning group
4. Attend training session
5. Conduct survey of community interest
6. Prepare first draft budget and staffing plan
7. Begin presentations to key groups
8. Secure initial employer commitments
9. Designate support system needs
10. Prepare curriculum design
11. Design student recruitment procedures
12. Prepare evaluation design
13. Prepare overall management plan
14. Prepare final budget and staffing plan
15. Secure planning group approval of total plan
16. Secure school board approval
17. Secure state agency approval
18. Establish formal advisory group
19. Select staff
20. Select students
21. Select EBCE facility
22. Orient new staff
23. Begin signup for specific employer sites
24. Occupy EBCE facility
25. Attend training session
26. Finalize curriculum delivery system
27. Establish student services system
28. Finalize management system
29. Obtain/print supplies, materials, forms
30. Begin program

Taken from Management and Organization guidelines prepared by Northwest Regional Educational Laboratory.

Therefore, the next steps of the implementation ladder are discussed in this guide to aid in this planning and anticipation process. Actual training manuals, curriculum materials, and management systems must be acquired and custom modified by the implementation. These original EBCE materials are identified in Appendix B.

CHAPTER 3

The Rationale and Nature of Experiential Learning

Experiential learning is not new; its beginnings predate formal education. Educational functions which once belonged to other institutions such as the family, the church and the local community have been shifted to formal educational organizations. Simultaneously, our society has switched from predominately rural system to a predominately urban society, from predominately manual labor to predominately capital intensive, from predominately experience-based to predominately information and communication-based. These changes have left our youth with an educational gap between the knowledge available in their formal curricula and those skills and abilities that are required of a roundly educated individual in daily life. Thus, the learning opportunities that were in the home and on the farm that once transmitted complex problem-solving skills and concrete experiences during the developmental years, remained largely untaught by the institutions in our society at large. These problem-solving skills and the skills necessary for lifelong learning were never thoroughly or systematically incorporated into the general core curriculum. James Coleman has written that we are confronted with a "poverty of experience in life." This poverty of experience has been repeatedly identified as a critical problem in the education of our youth and young adults by one presidential and educational commission after another, beginning in the early seventies and culminating most recently in calls for national youth service.

Experiential education, though not widespread, is not new to higher levels of education. A look at the historical pattern which moved post-secondary education away from experiential education methods and those trends which are bringing this teaching method back into college campuses and college classrooms, will provide a valuable framework and a rationale for implementing a post-secondary, experiential education program.

Cyril Houle, in an interesting essay frequently referenced, has described a time in the middle ages when the guild scholars dropped the active mode of experiential education as an instructional method and adopted the delivery of academic content by books, lectures and other passive modes of learning. This pattern eventually spread to most colleges and universities, and today typifies the predominant mode of instruction in college classrooms and seminars.

During the time this change was being made in the medieval colleges, there were many social forces which permitted it. Other institutions in that social system supplied the missing experiential base--family, work, community, and the church. Scholars, upon arrival at schools and universities, already had a wealth of concrete experiences to which could be attached the abstract theories and ideas provided in these formal settings.

Training for jobs and crafts, the seed of modern vocational education, was handled in the apprentice system by the guilds. However, this bimodal system soon broke down with the Industrial Revolution. The change vastly reduced the number of jobs requiring extensive apprenticeships, and it left the universities and colleges as the only remaining system available for formal adult instruction.

These events left a large gap between the theoretical dimension of concepts and the application to practical problems. The greatest pressure for change was being felt in the professions--education, medicine, agriculture, and engineering. Beginning around the late 1800s, with the land grant colleges, post-secondary schools of agriculture, forestry and engineering sprang up. In the early 1900s practical hands-on experience was systematically added to medical education, beginning at Johns Hopkins University, and spreading through all medical schools. As for education, it was John Dewey whose theory of experiences became the philosophic touchstone of the experiential learning movement and whose essays on experience and learning tied experiential learning to scientific inquiry. With this developing philosophical base for field experience education, came a number of new programs beginning with cooperative education at the University of Cincinnati.

One of the most widely known field experience education programs among post-secondary institutions is the Cooperative Education program begun at the University of Cincinnati in 1919. The name cooperative education refers to the relationship between the college and organizations in the community who work cooperatively to provide work situations as part of the educational program.

Cooperative education, while rich with experiential learning opportunities was also heavily vocationally oriented and there was little effort in its early days to systematically interrelate the academics of a program with the job experiences which their students had. By 1921 cooperative education was extended to liberal arts institutions, and between 1921 and 1953 some 43 collegiate level cooperative education

programs were developed. However, by 1978 the National Commission for Cooperative Education identified 932 programs which were operational, of which 459 were junior college programs and the remaining 473 senior college programs.

Through its historical development, cooperative education has taught potential field experience education implementers a number of important things:

- meaningful job experiences enhance college level learning,
- field experience education matures and develops its students more rapidly than does classroom delivered education,
- community organizations show a keen interest in enhancing education by providing work experiences for the young,
- field experience education programs are cost effective and can frequently be delivered at the same cost per student or less than other education programs,
- that credit for academic learning cannot be equated with on-the-job experience but must be evaluated on the basis of concrete evidence,
- field experience does generate desired educational content.

After World War II, pressure increased on educational institutions to educate students to not only solve problems, but also to deal with the normal conditions of life. In addition to the expansion of Cooperative Education, a variety of other forms of field experience education developed.

As a result of rapid expansion, dissemination and implementation of field experience education in colleges and universities, and as a consequence of the work on EbCE, much more is now known about what makes for successful

programs. Thus, some valuable implementation guidelines can be cited:

- o the use of learning contracts is important in determining both learning activities and for arranging the assessment of learning,
- o the age of students is not an important prerequisite for field experience,
- o ninety-five percent of college field experience education programs provide their students academic credit for their learning experiences,
- o criteria for selecting and placing students should be based upon those knowledges, skills and abilities which will enable the student to adopt the role required in a field placement,
- o the primary educational outcomes of field experience education include: putting theory into practice and increasing personal growth and development,
- o the primary rationale for academically accrediting field experiential learning are: it enhances an understanding of the relationship between work and education in ways the classroom cannot; it individualizes learning opportunities; fills the college commitment to individual growth and development; and it strikes a balance in college education between theoretical and applied,
- o experiential education programs are most frequently coordinated by a single individual or office,
- o experiential education placements are usually scheduled in alternating periods of in-classroom, out-of-classroom blocks of time by day or by semester.

The increasing utilization of experiential learning at the college level suggests that it might be useful to deal briefly with the instructional theory of experiential education. Bruner (1966) has defined a theory of instruction as "an optimum set of activities (a curriculum) organized by an outside agent (the instructor) for the purpose of bringing about learning." However, the successful implementation and institutionalization of an educational program requires two other components. This section includes three units important to effective implementation: instructional theory of experiential education, support systems and procedures, and contextual evaluation procedures.

First, we will look at the contents of an instructional system that are now current in college settings and extrapolate them to less traditional methods such as field experience instruction. Later we will examine managerial procedures including organizational components and finally implementation techniques unique to experience education.

What then are the characteristics of an instructional theory? Bruner (1966) suggests such a theory specifies how to enhance the sense of relevance of the learning act, specifies the optimal structuring of the body of knowledge being presented, outlines the most effective sequencing of materials, and attends to the kinds of reinforcement and extinction schedules and their sequencing for effective learning.

Several theorists have contributed to a growing body of knowledge which meets Bruner's criteria for guidelines for promoting effective experiential learning. These include John Dewey, James Coleman, and David Kolb. James Coleman has defined the experiential learning situation as one that "proceeds through acting or in some cases observing another

person in action and then experiencing and understanding the consequences of action" (Coleman, 1972). Coleman outlines instructional steps necessary for learning in this order: acting, understanding the events of a particular case or situation, generalizing, and acting in a new circumstance.

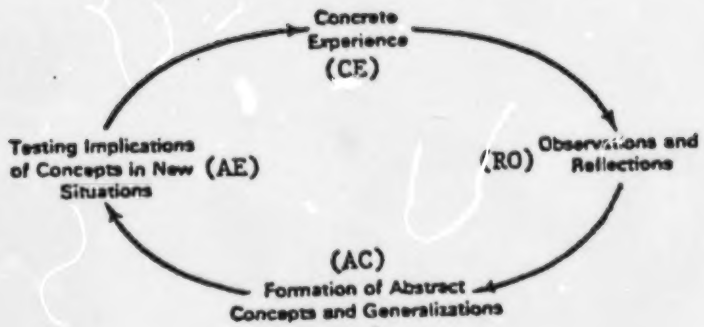
Kolb has elaborated upon this model, converting it more closely to an instructional theory in Bruner's sense of the word.

Figure 5 captures the experiential learning model as conceptualized by Kolb (Kolb, 1975). The reader will note several interesting similarities between this model and the steps that James Coleman has outlined. Kolb's model implies an invariant set of steps through which a learner should be taken in order to assure that desired learning outcomes have been achieved. The experiential instructional system, therefore, includes components which move the individual student through all four phases providing learning activities to accomplish each phase.

Phase 1. The first phase of the experiential learning cycle is concrete experience. It is similar to Coleman's stage of acting or experiencing action vicariously through the observation of others. Students are required to act or observe action comparatively early in the learning process. Typically, students are assigned tasks that are novel and which come from new social roles which students assume. These tasks demand immediate action such as making appointments, greeting adults, defining responsibilities, filling out forms, and other such activities that are usually associated with a new project. In many types of field experiences, service is frequently exchanged for learning. The purpose of this exchange is not "service" to the hosting agency, but to more legitimately involve

Figure 5

Four Phases of Instructional System



the student in important problems and functions within the host organization. This means that field experiences take on a "reality-based" flavor and help to expose students to a variety of new ideas and processes that are frequently associated with good field experience education. From a developmental point of view, students frequently observe novel approaches to routine problems and interact with others in the field setting who themselves define the situation in unexpected or novel ways to the student. Novelty and divergence are important pacers of developmental movement.

To obtain these desirable benefits, a field experience education program must insure that its students' concrete experiences do in fact occur and that they occur in such a way that they contribute to the desired learning goals of the student. In summary, concrete experiences are an important part of the instructional process. An effective experiential program should contain the following processes or procedures:

- a method of assessing student interests and systematically relating them to placements or to the activities of the placement site,
- a method of identifying students' academic objectives and matching them to field experiences,
- a process for aiding the student to anticipate and plan for experiences,
- a procedure or method for analyzing, classifying, and organizing field experiences so that they can be matched to student interests and educational performance.

There are a variety of ways to implement these processes. However, many programs do not have them systematically built into their student placement procedure or thoroughly organized enough to insure that this first

phase is carefully handled. Without the opportunity to anticipate both personal and academic learning outcomes and a procedure for appropriately matching students to opportunities which will help them achieve these outcomes, valuable educational performance cannot be adequately assessed or measured. In addition the strong motivations attraction of personalized placements and relevant learning projects can get easily lost in the learning scuffle. An example of a systematic matching system can be found in Figure 6, "Steps of the site selection process."

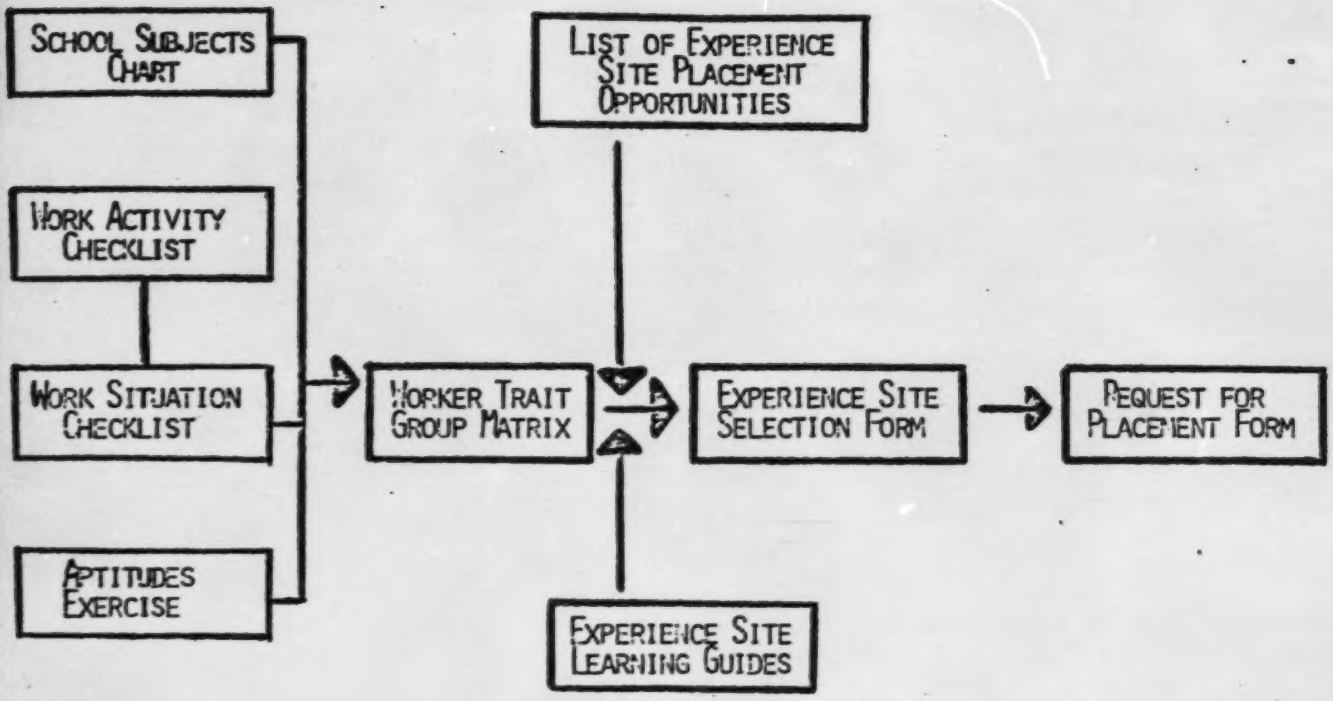
The planning form located in Appendix A of this document includes a checklist under the "instructional system" section that will help the implementer to determine whether appropriate components exist in an experiential education program which aid students in identifying concrete experiences.

Phases 2 and 3. The second and third steps of the experiential instruction cycle promote learning and inspire two levels of cognitive thinking: the analysis and identification of concrete events, both personal and objective, that have occurred in the field experience situation, and the generalization of these experiences to more abstract and broader contexts.

Experience is not the equivalent of learning (Keeton, 1976). This important but often ignored fact has been a chief source of criticism and skepticism about field experience education programs on the part of academicians. To think otherwise would be the equivalent of believing that the amount of time spent in the classroom is a measure of the amount of learning that occurred. Programs can easily fall into the practice of confusing teaching means with learning ends. Even traditional school systems have been known to equate time in classroom with learning and academic credit.

Figure 6

STEPS OF SITE SELECTION PROCESS



In order for students to know that they know, experience must go through the process of being put into words. In the second phase (of the experiential model) students must exercise their ability to identify, describe and analyze the specific concrete experiences which they have had and communicate these experiences to others. During this second phase of observation and reflection, programmatic provision must be made to enable students to record reality in an accurate fashion and sort through their own feelings about it. Both of these skills, that is accurate information-gathering and reflection, form the foundation for later growth of identity and purpose. In addition, they create an important platform for elementary forms of learning, particularly recognition and recall. And finally, the exercises of reflection and observation skills generates an experiential base from which students can put generalizations and synthesize a variety of experiences into more abstract concepts.

Programs which contain adequate provision for the second and third steps of the experiential learning cycle usually have the following components: a clearly established evaluation procedure which includes specified and measurable learning outcomes, and a reporting mechanism which requires students to "put into words" their experiences and bring evidence of the activities with which they have been involved.

John Dewey summarized this process quite effectively:

> The nature of experience can be understood only by noting that it includes an active and a passive element, peculiarly combined. On the active hand, experience is <u>trying</u>--a meaning which is made explicit in the connected term experiment. On the passive, it is <u>undergoing</u>. When we experience something, we act upon it, we do something to it; we then suffer or undergo the consequences. We do something to the thing and then it does something to us in return: such as the peculiar combination (Dewey, 1916).

A good example of an instructional procedure that adequately assures Phases 2 and 3 of the experiential learning model can be found in Figure 7 which is an example of an activity sheet from AEL's EBCE. The activity sheet is a form of mini-learning contract which specifies not only the concrete experiences that are to occur, including a sequential outline of learning activities that the student must undertake, but also the actions whereby the student communicates to others (in this case, the learning co-ordinator) the exact nature of his/her experiences. Depending upon the level of the activity sheet, the student may also be required to generalize these experiences to broader concepts.

The generalization component is assured since an activity sheet is built around the exploration of an integrated learning concept and field experience. The activity sheet requires the student to become involved in a concrete example of a concept and to communicate his/her understanding of both the specific events that occur to them as well as to generalize the concept to a broader subset of reality.

Phase 4. Perhaps the weakest link in most collegiate level field experience education programs is a systematic procedure to test the implications of learned concepts in new situations. This inherent weakness is most clearly evidenced by the constant complaint that college students do not know how to apply their learning in novel and new situations or to solve problems in the work setting. Since traditional college curricula are classroom based, very little opportunity is available for students to become involved in unplanned, novel, reality-based situations. For the most part the exercise of ideas is accomplished through planned simulations

Figure 7

PARTS OF ACTIVITY SHEET

1. WHAT IS TO BE LEARNED?

5. WHAT AMOUNT OF TIME WILL BE ALLOWED FOR COMPLETION OF A.S.?

Student _____

Learning Coordinator _____

Experience Site _____

Start 2/7 Estimated Stop 2/21

Actual Stop _____

Actual number of days to complete _____

Activity Sheet _____

Areas	NS	MA	S	CE	E/C	Other	Other
Sub-Concepts		3.4.0	3.5 4.2.0		1.2.0 1.4.0		
Points							

Site Information:

Police Department

SAS No.

Code

1. Define Problem
2. Gather Data
3. Analyze Data
4. Generalize
5. Communicate

Objective:

To determine how population distribution affects culture in terms of criminal activity

Evaluation Code

5. Excellent
4. Commendable
3. Satisfactory
2. Improving
1. Needs to Improve

Sub-Concept Description

Activities	Code	L.C.	Stu.
1. Obtain, through your RP, a map of your city showing the various police districts.	2		
2. Obtain a list of the most common types of crimes. Discuss the nature of these crimes with your RP and write down your findings.	2		
3. For a one-week period, keep a series of charts of how many of each major types of crimes are committed in each district and at what hours and by what groups.	3		
4. At the end of the week, analyze your charts and discuss with your RP: a) What crime was most frequent? Why? b) At what hour(s) is that crime most frequent? Why c) In what district(s) is each type of crime most frequent? Why? d) How does the crime pattern differ among districts (types, numbers, etc.)? Which has the most? The least? Why? e) Do the crime patterns seem to be related to the kind/density of population and/or businesses in a district?	4		
5. Determine whether most of these types of crimes are comaitted by individuals or groups. What kinds of groups (ages, characteristics, etc.)? Does the pattern vary by types of crimes? By district? Why do they vary?	4		
6. Describe the relationships, give reasons, and write a general conclusion about how population distribution affects a crime.			
7. Submit a report to your LC, including your charts, your lists and maps, your data, and your answers and conclusions. Evaluation will be on: completeness of data; neatness and clarity of charts; thoughtfulness of conclusions and answers; and sentence structure of narrative.	5		

2. WHAT ACTIVITIES WILL BE CARRIED OUT TO ACCOMPLISH LEARNING?

3. WHAT WILL THE RESULTING PRODUCT PRODUCT BE?

4. WHAT CRITERIA WILL BE USED TO EVALUATE A.S.?

Evaluation Comments:

Distribution: White -Student/Yellow - Learning Coordinator

Revised 7/1

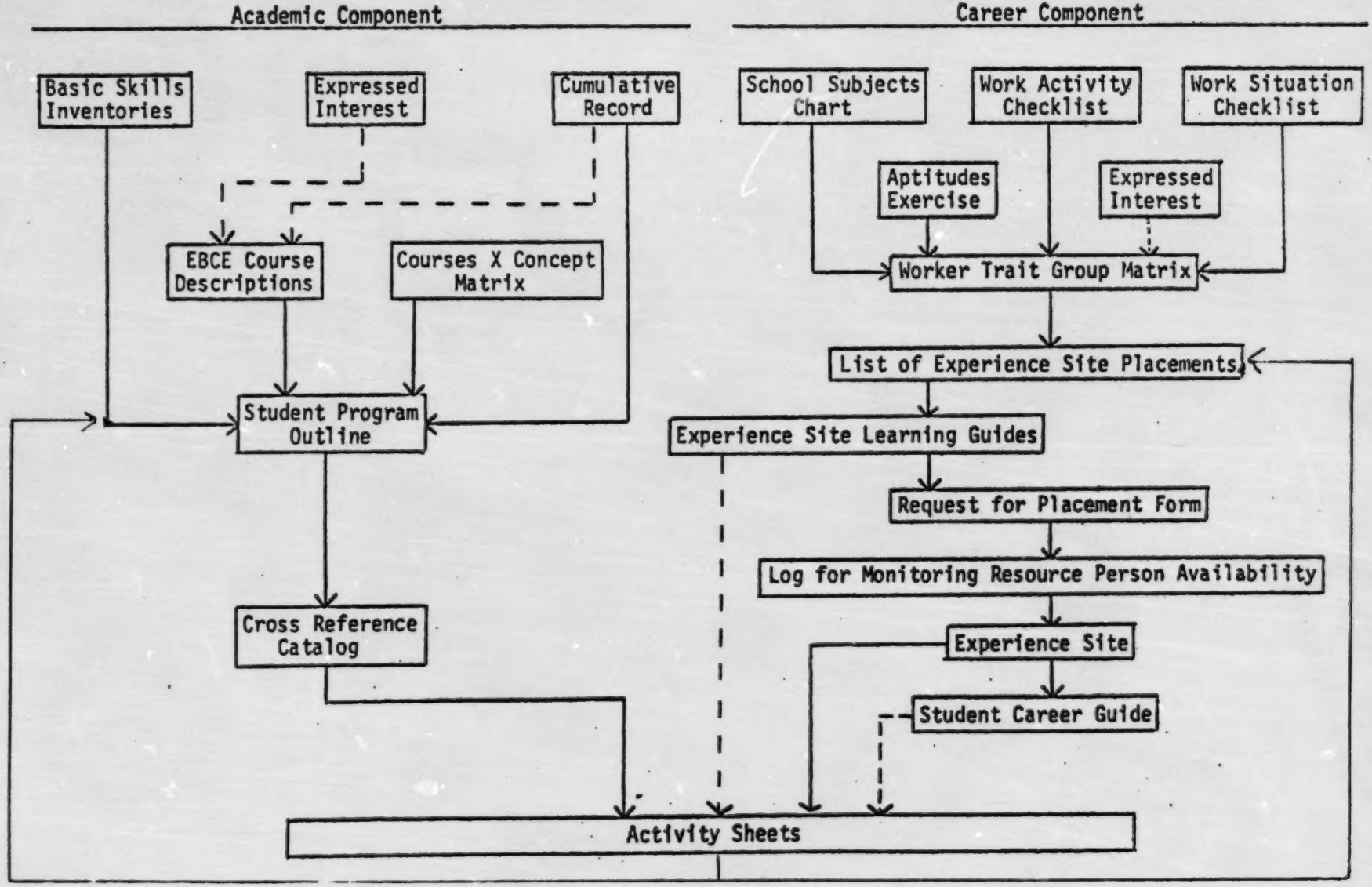


Figure 8

EBCE Instructional Delivery System

and contrived exercises in which the instructor and the students have a fairly good understanding of the potential outcomes. James Coleman, through his research in simulations, has concluded that individuals never really have control of their knowledge unless they have had an opportunity to test concepts in new situations. Experiential learning programs that achieve this phase of the experiential learning cycle are characterized by the following:

- o a systematic method for sequencing learning experiences around the same concepts;
- o a method of tracking students' learning and planning for hierarchical cognitive development;
- o a method of cycling students through the problem identification selection implementation and evaluation cycle several times during the enrollment period;
- o a procedure where students can hypothesize possible effects of action or of general principles in novel situations and predict their outcomes.

Figure 8 illustrates a programmatic method for assuring the testing and retesting of concepts in novel settings. It represents the systematic way EBCE programs develop individual learning plans and track the students through multiple experiences. This recycling of experiences gives the educational program a distinct interdisciplinary flavor.

The historical development of field experience education has resulted in a growing consensus about its instructional theory. Althof summarized many of these processes in his 1979 manuscript, "The Social Psychology of Field Experience Education." Althof's guidelines follow:

The literature has produced some basic guidelines important to effective field experience instruction. They are presented here as a guide for curriculum development.

1. Both personal development and academic retention are enhanced through field experience. Experience can develop an interest in learning and foster the skills necessary for learning, while academic study can satisfy intellectual curiosity and provide models and conceptualizations which expand both understanding and curiosity. (Quinn, 1972; Keeton, 1978).

2. Field experience activity should be determined by a student's current interests. The major change which field experience makes in the level of motivation of the student is by providing him with personally compelling reasons to learn. (Dewey, 1938).

3. Field experience should precede, coincide with, and intervene between basic courses. Field experience is meaningful college level experience only if the student is involved in a constant dialogue placing his experiences in a conceptual perspective and his academic training in a relevant light. This is sometimes referred to as the "didactic-experiential flip-flop model." (Coleman, 1975).

4. Field experience should be problem or task oriented. This is not to say that students need to be directly involved in the solution of social problems, but rather that problems, both academic and applied, give focus to student field activity. This may be synonymous to defining educational objectives on an individualized basis. (Dewey, 1951).

5. Field experience curriculum should be structured to insure an appropriate continuum of personal support of basic skills and conceptual processes. As students advance through several terms in the field they require differential support factors based on the student's developmental level. (Sanford, 1967).

6. Responsibilities should vary in complexity with a student's developmental advancement in both his formal curriculum and his experiences in the field. A student benefits by experiences which remain developmentally challenging to him. (Sanford, 1967).

7. Learning activities in the field experience program should be jointly determined by the field situation, the student's developmental level, and a placement activity interesting to the student. The focus of reading and research activities

is not meaningfully determined by the problems or tasks in which the student is engaged. The language, his level of analysis, and the sophistication of argument should be determined by his developmental stage. (Dewey, 1938).

8. Misalignment between the field experience setting and the student's cognitive level will advance, slow, halt, or regress a student's developmental process. The effect upon the student's developmental progress is determined by the degree of misalignment and his ego strength factors. (Perry, 1970). [Althof, 1979]

CHAPTER 4

An EbCE Profile (the AEL Model)

Experience-based Collegiate Education (EbCE)* is a field experience/ internship post-secondary program designed by the Experiential Education Division staff of the Appalachia Educational Laboratory (AEL) in Charleston, West Virginia. The heart of the AEL/EbCE is the original EBCE curriculum and a total instructional delivery system.

EbCE provides college students a rich enhancement to the traditional program of classroom learning. Through EbCE students obtain academic credit, explore the real dimension of careers, learn who they are and what they want to become, and master some of the skills that they will need to successfully negotiate the complex world of daily living. EbCE's goal is not to train students for specific jobs, but to provide students, by direct experience in the local community, an opportunity to actually study their academics in the context of experience sites. An "experience site" is any community organization where EbCE students conduct learning activities and projects with the assistance of regular employees; this term "experience site" is used interchangeably with the word "site" and "job site" and people in the community; not just to learn about responsibility, values and maturity but to become more responsible and mature by using the skills that are necessary in dynamic problem solving.

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*EbCE as distinguished from EBCE.

Instead of receiving all their formal instruction in classes, as in a regular college classroom, EbCE students:

1) look at or explore one or many different places to work in the community;
2) choose the projects and jobs they want to know more about; and
3) spend up to 13 weeks working on content-related projects at the job sites which they have selected.

To help students earn academic credit, EbCE provides individualized instruction through learning contracts (activity sheets) negotiated with the faculty facilitators who are called learning coordinators or LCs. Working with each student individually, LCs are able to incorporate academic learning with activities and experiences at the job site, and in their more traditional roles, translate these experiences into earned credits. Ideally, effective implementations require that designated faculty receive intensive training with experienced trainers before becoming LCs, and continuing on-campus technical assistance from staff during their first year in the LC role.

Upon entry into EbCE, each student is at a different point insofar as his or her ability to participate in experiential learning is concerned. Each has unique interests, abilities, academic backgrounds, personal traits, and a different readiness for self-directed learning. Provision for the assessment of prior learning and prior work experience can be included in the EbCE system without difficulty. The topics, people, and jobs with which each student deals can be and often are totally or partially different from those with which other students in the program deal.

Regardless of the course or curriculum, a primary goal is to create a set of learning experiences which is relevant to each individual and which meets the academic standards of the college. As a result, each student experiences his or her own special community in terms of placements, academics, learning style, and resource person. (Resource persons are employees at the local job sites who have been assigned to work with the EbCE students).

An EbCE student's program consists of an academic component and a job site location component (career selection). The academic and career procedures within EbCE are interrelated by the concept/inquiry model of learning. This model is learning-outcome oriented; as such, it has two major elements--concept learning and inquiry learning. The model is founded on the hypothesis that experiential learning is more manageable when organized around key academic concepts and objectives than when organized around course titles and academic disciplines.

Although campuses vary widely in their organization of field-based programs, the following scenario will provide a glimpse of EbCE in action.

Educational Process	One Business-Math Student's Experience
Highly valued learning o credit o experience o real problems o faculty consultation	A second semester sophomore wants to meet some of his/her requirements plus some electives in statistics by combining them with practical experience. After a thorough orientation which starts with a review of academic requirements, and includes personal planning instruments (such as tests,

Educational Process	One business-math student's experience
Prefield Preparation o learning to learn o academic planning o career planning	inventories, and self-assessment checklists), the business math student follows a self-paced placement search designed to enable him/her to select a field site which offers educationally valuable activities.
Systematic Matching o to learning activities o jobs Monitoring by Objectives	Imagine that this student wants to learn statistics. EbCE might place him or her in a testing lab, a market research firm, or even a quality control department in a manufacturing company. All placements are cross-referenced with a nationally used job classification system.
Student-directed, self-paced planning o efficient o cost-effective o clear o self-selected o goal oriented o college level	The student's work at the learning site would be monitored by a faculty learning coordinator (using attendance records and the results of completed learning projects) as well as by the resource person regularly employed at the community site. Learning activities to be accomplished at the site would be selected beforehand by the student, using two locally modified (from the original AEL/EBCE Cross Reference Catalogs) documents: 1. The EbCE Learning Outcomes catalogues, and 2. The EbCE Community Site Experiential Learning Guides

Educational Process	One business-math student's experience
	The self-directed plan is negotiated with the faculty learning coordinator; it includes specifications of the activities and products which would be used for the evaluation of the student's learning.
Faculty Control o academic level o performance standing o final projects o credit and grades	The EbCE Learning Outcomes catalogs contain educational objectives in Math, Science, English/Communications, Social Studies, Career Education, and any additional courses desired by the local program. These catalogs have been edited previously by local campus faculty; thus they meet local campus standards. Each educational objective is spelled out in specific site-related activities.
An Example Activity Sheet o Business Math o Site activities	Learning by doing. The student uses these Learning Outcome Catalogs to independently develop performance-based learning contracts called Activity Sheets. Suppose, for example, the student is required to learn the Statistical Concept: "How to compute the mean of a set of ungrouped data." The Activity Sheet could require the student to:

1. Discuss with the resource person at the community site the use of this statistic there,
2. Review that site's method of computing the mean,
3. Perform this calculation on data from the site, and
4. Turn in reports on each of the above steps.

Thus, the Activity Sheet details what the student will do at the community site (and/or seminar) in order to receive credit in statistics. Provisions in the EbCE program are made for the evaluation of this student by the faculty coordinator, the community resource person, and the student.

The learning activities which the student is required to perform are based on the steps of inquiry which is similar to the scientific method: define the problem, gathering data, analyzing data, generalizing, and communicating the conclusion(s). Cumulatively, students learn all five experimental steps by classifying these steps in the activities which they outline for their academic projects. These activity plans can be repeated a number of times during the course, thus preparing the student to think more rationally and more systematically about the process of problem solving. Parenthetically, it also encourages rational thinking about occupational choices which will constitute students' careers.

CHAPTER 5

Evaluating Student Progress

Specific procedures by which faculty members are instructed to evaluate experience-based education differ somewhat between the secondary and post-secondary educational levels. There is also some important difference between the legal obligations and the mechanisms used by these institutions to verify learning outcomes. In addition, institutional settings, the instructional framework, the autonomy of the faculty member, and the establishment of standardized performance outcomes, also differ between the secondary and post-secondary levels. Therefore, in an effort to be broadly useful to faculty of both institutional levels, this chapter outlines a few of the many program variations that exist, reviews some of the laws which govern secondary and post-secondary school evaluation efforts, and describes the agencies which have oversight concerning the quality control of educational processes and the establishment of learning outcomes.

However, the major thrust of this chapter is a learning measurement. Although there are many procedural differences between the post-secondary and secondary institutions, there are, despite these differences, many common processes that enable faculty members to do good learning-outcomes measurement. The same factors, for example, the same measurement criteria; the same factors in identifying and selecting measurement instruments; and the same planning procedures for the measurement of learning outcomes and performance outcomes in experience-based education and work education settings occur at both the secondary and post-secondary levels. It is

this common theme of generic processes which is addressed here. Furthermore, in the final analysis, the assurance of quality education lies in the relationship between the faculty assessor, his or her judgments in the assessment process and the evidence that learning has occurred.

Faculty involved in experiential education are calling for more guidance on assessment and measurement procedures. Several recent research reports have highlighted the need that faculty feel for additional skills.

In one of the early research reports conducted under the aegis of CAEL (Council for the Advancement of Experiential Learning), faculty members expressed strong needs for assessment skills. When asked to rank the importance of various types of assessment problems, faculty and administrators ranked these concerns in the top five categories:

(1) assessing the quality of prior learning,

(2) finding procedures for establishing assessment standards,

(3) determining reasonable guidelines for equating experience to credit hours,

(4) enabling students to identify learning which is relevant to their own goals, and

(5) documenting learning experiences.

With the increase in the number of academic programs and in the numbers of students receiving credit from them, more and more institutions are having problems transferring credit while maintaining high levels of quality assurance. In a recent survey, the American Association of Collegiate Registrars and Admission Officers located more of the growing number of institutions with non-traditional programs. This growth of poorly identified and novel educational experiences which are being recorded for academic credit is causing increasing concern.

The Council on Post-Secondary Accreditation (COPA) urges faculty development as one important solution to the problem of quality assurance in academic credit. A COPA survey reported in 1978 from a sample of 1,319 college educators indicated that its repondents ranked the awarding of credit for on-the-job life experience as the greatest cause of concern for them.

Both faculty and the accrediting bodies which monitor their institutions are expressing strong needs for better methods to measure and accredit nontraditonal, experiential learning situations. Present quality assurance methods such as the accreditation of institutions and programs is not sufficient to guarantee that learning has occurred; some more specific verification of the learning goals and learning outcomes must be established. Furthermore, while experiential education programs may be novel and new, quality assurance is still in the hands of the expert, the traditional faculty member, whose responsibility it is to identify, measure and evaluate learning. Warren Willingham (1976), in a review of critical issues of assessment, summarized the problems from three points of view:

(1) the point of view of practical steps of assessment of learning,

(2) the point of view of measuring, through instruments and evidence, what learning has occurred, and

(3) the point of view of the philosophical and ethical questions involved.

Figure 9 summarizes his results.

Figure 9

CRITICAL ASSESSMENT ISSUES FROM THREE FRAMES OF REFERENCE*

	FRAME OF REFERENCE		
Issue	*Practical (Stage of Assessment)*	*Technical (Psychometric Topic)*	*Philosophical (Educational Question)*
What is creditable?	IDENTIFY the learning acquired through life experience or learning incorporated in a sponsored program	Content Validity	What types of experiential learning justify college-level credit; and to what extent must learning be specified?
What does experiential learning mean?	ARTICULATE such learning to the educational goals or academic degree of the student	Construct Validity	Does crediting experiential learning change the meaning of the B.A. degree?
What constitutes evidence of learning?	DOCUMENT the fact that the student has participated in the learning experience	Intrinsic Validity	Should credit be based upon experience or learning?
How to insure equity?	MEASURE the extent and character of the learning acquired	Reliability	When learning experiences differ widely, how can assessment be consistent and equitable without being standardized?
How to define standards?	EVALUATE whether the learning meets an acceptable standard and determine its credit equivalence	Scaling	When learning experiences differ widely, how can educational standards be publicly understood and maintained?
What are adequate records?	TRANSCRIBE the credit or recognition of learning	Score Interpretation	How should the qualitative value of learning achievements be communicated to the student and to third parties?

*Taken from Warren Willingham, Critical issues and basic requirements for assessment. In Morris T. Keeton & Assoc. Experiential learning rationale, characteristics, and assessment. Jossey-Bass, San Francisco, 1976.

Warren Willingham has outlined the assessment steps necessary in both prior and sponsored experiential learning, contrasting the measurement activities of these two types of experiential education. Figure 10 represents these steps. It describes the major parts of the assessment process and explains the activities necessary in each step. The assessment process and the learning process must directly interrelate in the first three assessment activities identification, articulation and documentation. These three steps are frequently found in the successful instruction of quality experiential learning.

Figure 10

Six Basic Steps in Assessing Experiential Learning—Their Order and Application to Prior and Sponsored Learning

Step	Prior Learning	Sponsored Learning
IDENTIFY	1. Identify college-level learning acquired through life experience	2. Set specific learning objectives that fit the goals and the learning site
↓		
ARTICULATE	2. Show how and what parts of that learning are related to the degree objective	1. Decide on general learning goals that are related to the degree objective
↓		
DOCUMENT	3. Verify or provide evidence of learning	4. Maintain an integrated record as evidence of learning
↓		
MEASURE	4. Determine the extent and character of learning acquired	5. Determine whether learning meets the criterion standard previously set
↓		
EVALUATE	5. Decide whether the learning meets an acceptable standard and determine its credit equivalence	3. Determine the appropriate criterion standard required for credit
↓		
TRANSCRIBE	6. Record the credit or recognition of learning	6. Record the credit or recognition of learning

CHAPTER 6

Summary

EbCE looks back to a time when the entire community shared the responsibility for transitioning its youth to adulthood. Participating employers and other community resources provide facilities, equipment, supplies and personnel to help implement the EbCE program. The relationship between students and community resource persons is voluntary on both sides. A community site's scope, term and duration are negotiable, depending upon the availability of the community resources and the educational needs, interests and abilities of the student.

Analysis of community businesses and organizations to determine the learning experiences that are available at these sites (experience site analysis) is conducted as part of the program.

Present and former staff members involved in the development and evaluation of the original EBCE are still available for assistance in adopting and customizing an EbCE. Consultants who can provide training and technical assistance to new adopters can be located by contacting the original developers. Each new college and university that adopted the EbCE program to help standardize their field experience education offerings will want to refer to Appendix B and then make some modification to the system. Each year many individuals considering adoption of the EbCE program start with an indepth review of the program and explore with experienced staff members the possible adaptations that are possible to meet the needs of their own college program.

EbCE requires two professional roles not usually found in the traditional college system: the Faculty Learning Coordinator (LC) and the Experience Site Analyst (the person who conducts experience site analysis).

Depending upon the local needs program, the faculty learning coordinator role may incorporate the field placement, career component and academic component, or these may be separated as is true in many traditional programs. Either an intensive training program or diligent self-study of EBCE materials is needed before beginning any program operation. One should be fully cognizant of the basic principles and procedures of the Faculty Coordinator role. A check-list of topics include:

- o definition of the Faculty Coordinator and field placement coordinator role
- o mastery of site selection procedures
- o placement procedures
- o mastery of academic procedures
- o use of the inquiry mode of learning
- o mastery of the student activity sheet preparation
- o evaluation principles
- o academic and career counseling

From 1977-1979 AEL provided a fifth day of training used as a practicum, during which trainees worked with students to simulate and perform orientation activities (setting up a student's complete program during the first week of school) and practiced their newly acquired skills by simulating a typical day in EbCE. Additional topics covered during the practicum included filing and logistics, physical arrangements of the Faculty Coordinator's office, and trouble-shooting strategies.

The Experience Site Analyst is responsible for analyzing the community for learning activities which are useful to the academic program of students enrolled in EbCE. The Site Analyst role is frequently combined with the faculty coordinator's role. But in many colleges it is a position that is increasingly provided as a separate academic support service. The analyst contacts each potential EbCE experience site, determines who will be available to work with EbCE students, and interviews those individuals. During the interview, the analyst gathers information about the nature of the business, jobs performed within the business, and areas of career knowledge to which students can be exposed. All this information is compiled by the analyst into a set of documents called the Experience Site Learning Guides, used by the students and the Faculty Coordinators to aid in the selection of relevant experience site placements, and to write activity sheets which can be completed at the sites.

Site analyst training or self-study topics include:

- o selection and contact of sites for development
- o interviewing techniques
- o writing a functional task analysis statement
- o maintenance of liaison activities with community experience sites and personnel

In addition, trainees should learn experientially by analyzing a local experience site.

Many schools, colleges and universities are not prepared for the systematic nature of the full EbCE system. The range of organizational possibilities with EbCE are limitless. Yet it is not unusual for potential adopters to need guidance on how EbCE could fit into their program and

whether or not it will meet their educational needs. Three major organizational variations have been used to adapt EbCE to local sites:

- o CENTRALIZED: in this model, the entire program is administered campus-wide by a central coordinator or coordinators who handle most of the academics, site analysis, and student placement.
- o SEMI-CENTRALIZED: the program is coordinated from the central office as above, but the academics are delivered by traditional faculty members through their departments.
- o INFUSED MODEL: the program is adopted by individual faculty members within departments. Each faculty member operates independently, performing the role of Faculty Coordinator and Site Analyst and Placement Officer.

There is a wide range of variations to EbCE and its basic organizational format. Each program piece is designed to meet an instructional need and to be integrated with other components of the curriculum. Yet each can operate independently and can be adopted or excluded from the program as required on the local campus.

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APPENDIX A

PLANNING SHEET
IMPLEMENTING AN EXPERIENCE-BASED COLLEGIATE EDUCATION PROGRAM

This worksheet assumes that you or your College is interested in implementing field experience education. This is a feasability guide sheet which will help you isolate and evaluate key factors in your own setting. The question is, "What is 'do-able' in the educational unit in which you would like to achieve a high quality field experience program?" Listed below are key factors and necessary instructional processes which you should consider before attempting to compare among models, choose, and later implement a program.

The Decision points below should be considered in the left-hand column, and notes and/or decisions can be noted in the right-hand column titled 'EXISTING RESOURCES.' This is a guide to your situation as well as you can assess it. "Guesstimates" may be the best data available.

YOUR NAME _____

YOUR TITLE _____

SCHOOL/INSTITUTION NAME _____

ACADEMIC DISCIPLINE ( ) single discipline (specify) _____
( ) multi-disciplinary

ORGANIZATIONAL BASE ( ) Central Placement Advising Office
( ) Academic Departmental Program
( ) Single Field Experience Course
( ) External Campus Office: Independent Brokerage and Placement Organization

LEVELS OF ACADEMIC INTEGRATION ORGANIZATIONAL FACTORS	PRESENT POLICIES AND RESOURCES IN PROGRAM		
	Doing now	Would like to do	Reference
For whom is the program targeted?			
a. special ed.			
b. gifted and talented			
c. vocational ed.			
d. normal school population			
e. continuing ed/adult ed			
f. post-secondary, normal pop. . .			
What can you do in terms of awarding credit for experience?			
a. all academic fields award credit			
b. credit for limited academic courses can be awarded			

	Doing now	Would like to do	Reference
c. only courses designated as separate field experience course(s) are used to award credit			
d. mixed policy depending upon student			
e. a required all university experiential learning comp. . . .			
How academically credible is your field experience program to each of the following groups?			
a. administration			
b. faculty			
c. students			
d. parents			
What amount of time can students be placed in the field?			
a. full time (50-90% on-site)			
b. moderate (20-50% on-site)			
c. short (less than 20%)			
d. different options as listed above for different students . . .			
What kind of scheduling is feasible for your field experience students?			
a. separate schedule			
b. interlocking with existing schedule			
c. other			
What staffing arrangements are feasible?			
a. source of staff			
1. full time staff			
2. part time staff			
b. number of separate staff positions			
1. separate roles, eg., placement coordinator, faculty member, etc.			
2. combined responsibilities . .			
c. staff/student ratios			
1. 1 learning coordinator to 10 students			
2. 1 learning coordinator to 15 students			
3. 1 learning coordinator to 20 students			
4. 1 learning coordinator to more than 20 students			

	Doing now	Would like to do	Reference
How/who will award credit?			
a. separate program faculty who report to academic department			
b. curriculum review panel			
c. awarded by field experience unit separate from Academic Departments			
d. other			

INSTRUCTIONAL COMPONENTS

	Doing now	Would like to do	Reference
INTAKE OF STUDENTS			
Systematic orientation of students			
Articulation with academic requirements and planning			
Student-site matching based on student's interests/aptitudes/ preferences			
Procedures for student goal selection and specification			
Participant—observation training			
Development of learning contracts			
Procedures for personalism and rapport with faculty			
Value clarification procedures			
Pre-placement exploratory visits			
Procedural structure, manuals, workbooks			
CONCRETE EXPERIENCES			
Analysis of specific activities at sites			
Pre-developed activities and projects at community sites			

	Doing now	Would like to do	Reference
Feedback procedures and evaluations on experiences and actions . . .			
Pre-planning of learning activities at field site			
Clustering of sites for easy access and selection			
Training of community site personnel			
Site exploratory activities			
Procedures for linking site activities to academic objectives . .			
Site monitoring and clearinghouse procedures			
OBSERVATION AND REFLECTION			
Periodic interviews and report sessions			
Observation logs			
Written reports on projects, activities and observations			
Attendance recording procedure			
Pre-determined site exercises and student evaluation activities			
FORMULATION OF CONCEPTS AND ABSTRACTIONS			
Written essays			
Verbal reports			
New products from projects			
Planned recycling of student to test working hypotheses			
Critical incident reports			

	Doing now	Would like to do	Reference
Multi-disciplinary focus			
TESTING IMPLICATIONS IN NEW SETTINGS			
Recycling procedures based on new interests, or to test working hypotheses			
On-going development of new learning objectives and learning contracts . .			
Periodic evaluation			
OTHER COMPONENTS			
Administrative policy			
Staff development			
Formative program evaluations			
Cooperation with other counseling and advising programs			

MANAGEMENT SYSTEMS

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APPENDIX B

3/8/76

INSTRUCTIONAL MATERIALS IN AEL'S EBCE

ACTIVITY SHEET. The Activity Sheet (AS) is a one-page form documenting the objectives, learning activities, performance criteria, and timelines which constitute an individual student's program. The AS is, therefore, the primary record used by the Learning Coordinator (LC) and student to plan, monitor, and evaluate student performance and to translate the performance into academic credits.

ADMINISTRATIVE MANUAL FOR EBCE. The Administrative Manual for EBCE is a two-part document addressed to the person with overall responsibility for EBCE operations. Part 1 provides guidelines for the typical kinds of decisions made by an EBCE Operations director; Part 2 presents a complete management by objectives system which could be adapted/adopted by an EBCE operations director.

BASIC PROCEDURES MANUAL. The Basic Procedures Manual is the basic EBCE reference tool which explains in a step-by-step fashion all forms, documents, and procedures used in the EBCE program.

BASIC SKILLS INVENTORIES. The Basic Skills Inventories are basic skills indices administered to EBCE students during orientation to identify potential weaknesses which may require remediation.

CAMERA-READY EBCE CONSUMABLE FORMS. This booklet contains camera-ready copy of all forms necessary to operate an EBCE program, together with recommendations on the quantities needed and a formula for estimating those quantities.

CROSS-REFERENCE CATALOG. The Cross-Reference Catalog (CRC) is a five-volume curriculum area reference document which enables LC and student to develop

individualized activity sheets. The CRC lists by discipline areas the major concepts, sub-concepts, interest areas, and objectives along with related in-house and community resources that constitute the EBCE curriculum. Space is provided for entries of new resources and activities as they are identified.

EBCE IMPLEMENTATION GUIDE. The Implementation Guide provides an overview of the EBCE program including materials and services available to adopters of the program. Proposal writers and local planners will find the verbiage in this document extremely useful in describing the components of the AEL/EBCE program.

EXPERIENCE SITE ANALYSIS MANUAL. This Experience Site Analysis Manual is the key document needed to train site analysts in how to analyze a community's institutions in order that they can be used effectively as learning environments. In addition to being a manual to be used during the training period, this document also is the prime reference to which the analyst can refer following completion of the training sessions. *The EXPERIENCE SITE ANALYSIS TRAINING MANUAL* is a package of materials which supports a two-day training session for those persons selected to serve as Experience Site Analysts in an EBCE program.

EXPERIENCE SITE LEARNING GUIDE. The Experience Site Learning Guide (ESLG) is a booklet which documents the work opportunities, conditions, and requirements at individual experience sites. The ESLG's purpose is to assist students and LC's to make informed choices of sites for student placement.

GUIDE FOR RESOURCE PERSONS. The Guide for Resource Persons is a pamphlet explaining the duties of those persons to whom EBCE students are directly assigned while at experience sites. The Guide is distributed to Resource

Persons (RP) either during the analysis of the experience site or at the beginning of the first student placement.

INTRODUCTORY GUIDE TO ACTIVITY SHEET PREPARATION. The Introductory Guide to Activity Sheet Preparation is a reference work for LC's which contains sample activity sheets for each of the five major discipline areas.

LEARNING COORDINATOR SITE VISIT REPORT FORM. The Learning Coordinator Site Visit Report is a one-page form documenting the outcomes of site visits made by EBCE staff members to RP's and students.

LIST OF EXPERIENCE SITE PLACEMENT OPPORTUNITIES. The List of Experience Site Placement Opportunities is a custom-made document used by student and LC to select Resource Persons with whom the student may be placed. The document lists Resource Persons according to their respective Worker Trait Group numbers.

LOG FOR MONITORING RESOURCE PERSON AVAILABILITY. The Log for Monitoring Resource Person Availability is a custom-made document which allows for the recording, control, and retrieval of existing student site placements by the Placement Coordinator or LC. It is categorized by Worker Trait Group number, job title, Resource Person, experience site, and placement interval.

NINE-WEEK EVALUATION FORM. The Nine-week Evaluation Form is a one-page "report card" used by negotiation between the student and the LC to document for individual students and their parents the overall progress, achievement, and attitude. This may be reviewed with the parents in a teacher-parent conference.

REQUEST FOR PLACEMENT FORM. The Request for Placement Form (RPF) is a one-page form which documents each placement request and assignment of all EBCE

students. The RPF for each student provides a record of individual student's site placements, transportation arrangements, dates, and times of placement, etc.

REVIEW OF STUDENT'S PROGRAM FORM. The Review of Student's Program Form is a one-page form completed by the Learning Coordinator (LC) which documents the overall progress of individual EBCE students. The information on the form serves as a basis for regularly scheduled clinical reviews of an individual student's program/progress with EBCE instructional staff.

SEMESTER OR END-OF-YEAR EVALUATION FORM. The Semester or End-of-Year Evaluation Form is a one-page form used by the LC to document individual student progress, achievements and attitudes over a full-semester and to document a rating for the student in each academic area.

STUDENT CAREER GUIDE. The EBCE Student Career Guide is both the reference work and record used by individual students to document growth in four areas: 1) knowledge about self, 2) knowledge about experience sites, 3) knowledge about occupations and their characteristics, and 4) career decision making and planning. The guide is a working document that can be used for one student for one year.

STUDENT EVALUATION FORM. The Student Evaluation Form is a one-page form used by RP's to assess individual student's achievements, progress, attitude, behavior, and attendance while on site.

STUDENT PROGRAM GUIDE. The Student Program Guide is both a reference work and a record used by students and LC's to document individual student's growth in three areas: 1) career preferences and subsequent experience site selection, 2) fulfillment of academic requirements, 3) development of interests,

aptitudes, and temperament factors. The guide is a working document that can only be used for one student for a year. It should be regularly monitored and updated by the LC.

STUDENT RECORD SHEET. The Student Record Sheet is a one-page form by which an LC documents the attendance and placements of all assigned students.

APPENDIX C

Locations of College/University EBCEs

	AEL Model	Far West Model	Northwest Model	RBS Model	Hybrid Model
Immediate Post-High School or College	Fort Dodge (Inquiry), Ia.	Alton/Godfrey, Ill.	Searey, Ark.	-	Bradenton, Fla.
	Tupelo, Miss.	Greenville, Me.	Carson City, Nev.	-	Baltimore, Md.
	Martinsburg, WV.	Houlton, Me.	Watertown, SD	-	
Adult	Fort Dodge (Inquiry), Ia.	Alton/Godfrey, Ill.	Carson City, Nev.	Madison, WI	
	Hagerstown, Md.	Greenville, Me.			
		Houlton, Me.			
		Orland, Me.			
		Presque Isle, Me.			

Located through utilization of Spotts, R.L. and B.B. Hampson. National directory of experience-based career programs. San Francisco: Far West Laboratory, 1979.